

**Amendments to the Claims:**

This listing of claims will replace all prior version, and listings, of claims in the application:

**5    Listing of Claims:****1. (currently amended) A method comprising:**

routing a set-up message to a plurality of nodes in at least one transport network,  
wherein said set-up message reserves network resources for a plurality of different traffic  
10 | paths through said at least one transport network as said set-up message visits each of  
said plurality of nodes; and

routing said set-up message to said plurality of nodes in said transport network,  
wherein said set-up message provisions said reserved network resources for said plurality  
of different traffic paths through said at least one transport network as said set-up  
15 | message revisits each of said plurality of nodes;

wherein the reserved network resources are provisioned only if all of the  
resources needed for the plurality of different traffic paths through said at least one  
| transport network have been successfully reserved.

20        **2. (currently amended) The method of claim 1 wherein at least one of said**  
| **plurality of different traffic paths through said at least one transport network is a working**  
**path and wherein at least one of said plurality of different traffic paths through said at**  
**least one transport network is a protection path for said working path.**

25        **3. (original) The method of claim 1 wherein said set-up message revisits each of**  
**said plurality of nodes in the reverse order in which said set-up message visits each of**  
**said plurality of nodes.**

30        **4. (original) The method of claim 1 wherein said transport network is a mesh**  
**network.**

3

5. (original) The method of claim 1 wherein said transport network is a ring network.

6. (currently amended) The method of claim 1 wherein at least one of said  
5 | plurality of different traffic paths through said at least one transport network is a  
multicast traffic path.

7. (previously presented) The method of claim 1 wherein some of said plurality  
of nodes are in a first transport network and some of said nodes are in a second transport  
10 | network.

8 – 15. (canceled)

16. (currently amended) A method comprising:  
15 | routing a set-up message to a plurality of nodes in at least one transport network,  
| wherein said set-up message reserves network resources for a plurality of different traffic  
| paths through said at least one transport network as said set-up message visits each of  
| said plurality of nodes; and  
| revisiting said plurality of nodes with one or more set-up messages, wherein said  
20 | one or more set-up messages provision said reserved network resources for said plurality  
| of different traffic paths through said at least one transport network as said one or more  
| set-up messages revisit each of said plurality of nodes;  
| wherein the reserved network resources are provisioned only if all of the  
| resources needed for the plurality of different traffic paths through said at least one  
25 | transport network have been successfully reserved.

17. (currently amended) The method of claim 16 wherein at least one of said plurality of different traffic paths through said at least one transport network is a working path and wherein at least one of said plurality of different traffic paths through said at least one transport network is a protection path for said working path.

5

18. (currently amended) The method of claim 16 wherein at least one of said plurality of different traffic paths through said at least one transport network is a multicast traffic path.

19. (previously presented) The method of claim 16 wherein some of said plurality of nodes are in a first transport network and some of said nodes are in a second transport network.

20. (currently amended) A method comprising:  
15 routing a set-up message to a plurality of nodes in at least one transport network, wherein said set-up message reserves network resources for a plurality of different traffic paths through said at least one transport network as said set-up message visits each of said plurality of nodes; and  
routing said set-up message to said plurality of nodes in said transport network,  
20 wherein said set-up message coherently provisions said reserved network resources for said plurality of different traffic paths through said at least one transport network as said set-up message revisits each of said plurality of nodes.

21. (currently amended) The method of claim 20 wherein at least one of said  
25 plurality of different traffic paths through said at least one transport network is a working path and wherein at least one of said plurality of different traffic paths through said at least one transport network is a protection path for said working path.

22. (currently amended) A method comprising:

routing a set-up message to a plurality of nodes in at least one transport network,  
wherein said set-up message reserves network resources for a plurality of different traffic  
paths through said at least one transport network as said set-up message visits each of  
5 said plurality of nodes; and

revisiting said plurality of nodes with one or more set-up messages, wherein said  
one or more set-up messages coherently provision said reserved network resources for  
said plurality of different traffic paths through said at least one transport network as said  
multicast messages revisit each of said plurality of nodes.

10 23. (currently amended) The method of claim 22 wherein at least one of said  
plurality of different traffic paths through said at least one transport network is a working  
path and wherein at least one of said plurality of different traffic paths through said at  
least one transport network is a protection path for said working path.

15 24. (currently amended) A method comprising:

checking the nodes of a plurality of proposed different traffic paths through at  
least one transport network to ensure that each node can provide the resources needed to  
establish the proposed different traffic paths through said at least one transport network,  
wherein the nodes are checked by sending a set-up message to the nodes;

20 reserving, at each node, the resources needed to establish the proposed different  
traffic paths through said at least one transport network if the resources are available; and  
provisioning, at each node, the resources needed to establish the proposed  
different traffic paths through said at least one transport network only if all of the  
resources needed to establish the proposed different traffic paths through said at least one  
25 transport network have been successfully reserved.

25. (previously presented) The method of claim 24 wherein the nodes are  
checked one node after another.

6

26. (previously presented) The method of claim 24 wherein the set-up message includes an indication of the order in which to check the nodes.

5 27. (previously presented) The method of claim 26 wherein provisioning the resources comprises routing the set-up message to the nodes in the reverse order in which the nodes were checked.